



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/665,698 | 09/17/2003 | Xin Xue | SONY-26300 | 6038 |
| 28960 | 7590 | 06/19/2006 | EXAMINER | |
| HAVERSTOCK & OWENS LLP 162 NORTH WOLFE ROAD SUNNYVALE, CA 94086 | | | | CHEN, ALAN S |
| | | ART UNIT | | PAPER NUMBER |
| | | | | 2182 |

DATE MAILED: 06/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|--------------------------|------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/665,698 | XUE, XIN |
| | Examiner Alan S. Chen | Art Unit 2182 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 17 September 2003.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-26 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-26 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 17 September 2003 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

6/3/06


Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to because Fig. 3 gives numeric labels with corresponding textual labels. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Method of and system for large file transfers involving personal digital assistants.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claims 1 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps/elements are: after step/means "c" in claims 1 and 7 respectively, the remaining parts of the files are also partitioned and stored into records and the record buffer. The claims currently on state only one record is put in the buffer and then transferred. Examiner recommends the wherein clause be placed immediately after step/element "c".

6. Claims 1 and 7 recites the limitation "the records" in lines 7. There is insufficient antecedent basis for this limitation in the claim. Examiner assumes the records are created after step d, when reading of portion of file is repeated until multiple records are created.

7. Claims 6 recite the limitation "the database" in line 5. There is insufficient antecedent basis for this limitation in the claim. Examiner assumes the database is the collection of records at the receiving computer (PDA).

Art Unit: 2182

8. Claims 2-6 and 8-12 are rejected as being dependent on rejected base claims.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claims 1-26 are rejected under 35 USC 103(a) as being unpatentable over US Pat. Pub. No. 2005/0044250 to Gay et al. (Gay) in view of US Pat. Pub. No. 2003/0004947 to Coverston.

12. Per claim 1, Gay discloses a method (*Fig. 8*) of transferring an application file (*Fig. 4, element 106*) from a personal computer (*Fig. 4, element 102*) to a second computer (*Fig. 4, element 104*) through a conduit (*Fig. 4, communication between two computers is a network conduit, e.g., Ethernet*); the method comprising: a) generating a file corresponding to the application file (*Fig. 4, element 106 is a generic file, from any application client, element 102, generates*); b) reading a portion of the file into a record (*Fig. 8, element 304, a block is equivalent to a record of information, a fraction of the*

*whole file; Fig. 4, element 114, file partitioner breaks file records; Paragraph 34), wherein the record is a predetermined size (Paragraph 49, "...file is divided into a desired number of blocks to facilitate transfer. The **size and number of blocks can be specified as configuration data from the user...**", emphasis added); c) copying the record to a record buffer (Fig. 4, element 115 is the record buffer; Paragraph 34, buffer stores all the blocks from the file partitioner); and d) transmitting the records in the record buffer to the second computer (Fig. 4, element 118; Fig. 8, element 316 and 318, all blocks transfer to second computer), wherein reading a portion of the file into a record is repeated until all of the file is read into a set of records (Paragraph 34, the blocks are encoded with ordinal identification data representing their appropriate position in the sequence and stored in a buffer 115...").*

Gay does not disclose expressly the second computer being a personal digital assistant.

Coverston discloses transfer of files from one computer storage system to another computer storage system over a network (Fig. 1). Coverston expressly discloses the computer storage system capable of being a palm computer (Paragraph 22)

Gay and Coverston are analogous art because they are from almost the identical problem solving area in trying to send a large data file over a network and breaking the large data file into smaller pieces. Coverston shows a very similar methodology to Gay (Fig. 3, where the file, element 70, is partitioned into blocks and sent to over a network, element 18).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to have the second computer in Gay to be usable as a personal digital assistant.

The suggestion/motivation for doing so would have been Gay discloses, generically, the second computer simply as a machine that receives the partitioned file records the personal client computer transferred. The trend in miniaturization of computers is well-known, evident by the prediction decades ago by Gordon Moore, where complexity of integrated circuits doubles every 18 months and similarly the shrinkage in size of integrated circuits follows therefrom (see *extrinsic evidence, Wikipedia->Moore's Law, attached to this office action*). Hence, the second computer system in Gay clearly can be embodied in various form factors. Coverston confirms this, where the computer system used in data transfer is a personal digital assistant, Coverston performing a the identical function as Gay in transferring of large data files.

Therefore, it would have been obvious to combine Gay with Coverston for the benefit of using computers of various form factors in the transfer of large files.

13. Per claim 2, Gay combined with Coverston discloses claim 1, wherein Gay further discloses an application information block is transmitted with the contents of the record buffer (*Fig. 8, element 310, configuration information is sent to the second computer, configuration having number of desired connections and the size of the file, Paragraph 51*).

14. Per claims 3 and 5, Gay combined with Coverston discloses claim 1 and 2, respectively, Gay further disclosing allocating the predetermined record size and

calculating the number of records prior to reading a portion of the file into a record and sending it with the application information block (*Paragraph 49, the size and number of blocks is predetermined in advance by the user, "...the size and number of the blocks can be specified as configuration data from the user..."*).

15. Per claim 4, Gay combined with Coverston discloses claim 3, wherein Gay disclose the transmission of the blocks/records being by TCP/IP (*Paragraph 21*), where it is well-known that the maximum allowable total length of a packet is 64KB (see extrinsic evidence, *Wikipedia->IPv4, attached, under the heading Packet structure->Total Length*).

16. Per claim 6, Gay combined with Coverston discloses claim 1, Gay further disclosing when the contents of the record buffer are received in at the second computer, the method further comprising: a) reading the application information block (*Fig. 8, element 310 and 312, configuration data sent and received at the second computer before records can be send and assembled*); b) opening the records (*Fig. 9, element 352*); c) reading each of the records of a database (*Fig. 9, elements 354-366, database is the culmination of all the records received, represented by Fig. 4, element 120 or 122*); d) writing each of the records of the database to a storage heap (*Fig. 4, element 108; Fig. 9, element 372 is the storage heap*); and e) closing the file (*Fig. 9, element 376*).

17. Per claims 7-26, all the limitations in these claims are covered and are substantially similar, if not identical, to claims 1-6. Therefore the rejection by Gay combined with Coverston of claims 1-6 is applied accordingly. Note, the database

Art Unit: 2182

manager in claim 12 is shown in Fig. 4, element 116 of Gay; the file stream manager in claim 18 is shown in Fig. 4, element 124 of Gay.

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Patents and patent related publications are cited in the Notice of References Cited (Form PTO-892) attached to this action to further show the state of the art with respect to transfer of large data files by breaking the file down into small partitions.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alan S. Chen whose telephone number is 571-272-4143. The examiner can normally be reached on M-F 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim N. Huynh can be reached on 571-272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ASC
06/03/2006

Alan S. Chen
6/3/06